

Fact Sheet



For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-08100155-2023**
Application Received: **January 23, 2023**
Plant Identification Number: **03-54-081-00155**
Permittee: **Raleigh County Solid Waste Authority**
Mailing Address: **200 Fernandez Drive, Beckley WV 25801**

Revised: NA

Physical Location: Beckley, Raleigh County, West Virginia
UTM Coordinates: 485.50 km Easting • 4186.39 km Northing • Zone 17
Directions: From U.S. Route 19 near Beckley, WV, take County Road 8 (Ragland Road) to Fernandez Drive. The landfill entrance is the first road on the right off of Fernandez Drive.

Facility Description

The Raleigh County Sanitary Landfill is a municipal solid waste (MSW) management facility that operates under SIC Code 4953. The landfill accepts municipal solid waste, construction and demolition debris, and approved residual waste streams. Landfill gas is collected through a number of extraction wells and controlled by two landfill gas-to-electricity engine/generator sets.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2022 Actual Emissions
Carbon Monoxide (CO)	82.7	2.33
Nitrogen Oxides (NO _x)	10.8	0.01
Particulate Matter (PM _{2.5})	9.4	1.32

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2022 Actual Emissions
Particulate Matter (PM ₁₀)	49.6	11.71
Total Particulate Matter (TSP)	203.7	55.34
Sulfur Dioxide (SO ₂)	3.6	<0.01
Volatile Organic Compounds (VOC)	13.8	9.4
Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
1,1,1 – Trichloroethane (Methyl Chloroform)	0.05	0.04
1,1,2,2 – Tetrachloroethane	0.16	0.11
1,1 – Dichloroethane (Ethylidene Dichloride)	0.21	0.14
1,1 – Dichloroethene (Vinylidene Chloride)	0.17	0.01
1,2 – Dichloroethane (Ethylene Dichloride)	0.36	0.02
1,2 – Dichloropropane (Propylene Dichloride)	0.18	Not Reported
Acrylonitrile	0.29	0.20
Benzene	0.13	0.09
Carbon Disulfide	0.04	0.03
Carbon Tetrachloride	<0.01	<0.01
Carbonyl Sulfide	0.03	0.02
Chlorobenzene	0.02	0.02
Chloroethane (Ethyl Chloride)	0.07	0.05
Chloroform	<0.01	<0.01
Dichlorobenzene	0.03	0.02
Dichloromethane (Methylene Chloride)	1.7	0.70
Ethylbenzene	0.43	0.29
Ethylene Dibromide	<0.01	<0.01
Hexane	0.50	0.34
Mercury (Total)	<0.01	<0.01

Plantwide Emissions Summary [Tons per Year]		
Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
Perchloroethylene (Tetrachloroethylene)	0.54	0.36
Methyl Isobutyl Ketone	0.17	0.11
Toluene	3.17	2.12
Trichloroethylene (Trichloroethene)	0.32	0.22
Vinyl Chloride	0.40	0.27
Xylenes	1.12	0.75
Hydrogen Chloride (Hydrochloric Acid)	9.4	<0.01
Total HAPs	19.53	5.91

Some of the above HAPs may be counted as PM or VOCs.

Non-methane organic compounds (NMOC) – The current emission rate estimate (calculated for year 2022) is 24.39 Mg/yr. The projected closure year is 2070. The projected NMOC emission rate of 34 Mg/yr, triggering the requirements for the construction of a collection and control system will occur in the year 2049. The NMOC emission rate estimates were calculated using EPA’s Landfill Gas Emissions Model (LandGEM) software. The values used for k and Lo were “0.050 year⁻¹” and “170 m³/Mg” respectively. The site specific NMOC concentration used in the model was 281 ppmv as hexane, as determined by Tier 2 testing in December 2022.

Title V Program Applicability Basis

This facility has a design capacity greater than or equal to 2.5 million megagrams and 2.5 million cubic meters. Due to this facility's design capacity, Raleigh County Solid Waste Authority is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Review permits for stationary sources
	45CSR23	To Prevent and Control Emissions from Municipal Solid Waste Landfills
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61, Subpart M	Asbestos inspection and removal

	40 C.F.R. Part 82 Subpart F	Ozone depleting substances
State Only:	45CSR4 45CSR17	No objectionable odors. To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and other sources of Fugitive Particulate Matter

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2671A	12/06/2007	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a renewal of the Title V permit which was issued on July 24, 2018. Changes to the most recent version of the Title V permit consist of the following:

- Sections 2 and 3
 - Permit Conditions 2.1.3, 2.11.4, 2.17, 2.22.1, 3.5.3, 3.5.4, 3.5.7, 3.5.8.a.1, 3.5.8.a.2 were updated to the most recent version of the Title V Boilerplate.
- Section 4
 - The requirements from Section 5 of the previous Title V permit for the Landfill Areas were moved to Section 4 to maintain consistency with the formatting used in the other MSW Landfill Title V permits.
 - This section for Landfill Areas underwent major changes due to 40 CFR 60 Subpart WWW changes that were published on March 26, 2020, and changes to 45CSR23 effective June 1, 2021.
 - The Raleigh County Sanitary Landfill is a MSWL that commenced construction, reconstruction, or modification on or after May 30, 1991, but before July 14, 2014 and is subject to the requirements of 40 CFR 60 Subpart WWW. According to 40CFR§60.750(d), an affected facility must continue to comply with 40 CFR 60 Subpart WWW until it becomes subject to the more stringent

requirements in an approved and effective state or federal plan that implements 40 CFR 60 Subpart Cf or it modifies or reconstructs after July 17, 2014 and becomes subject to 40 CFR 60 Subpart XXX. 45CSR23, effective on June 1, 2021 implements 40 CFR 60 Subpart Cf, so the Raleigh County Sanitary Landfill is now subject to the requirements of 45CSR23 instead of 40 CFR 60 Subpart WWWW. Therefore, Title V permit Section 5.0's former conditions from 40 CFR 60 Subpart WWWW were replaced with the conditions from 45CSR§23-7. Conditions within 45CSR§23-7 for a MSWL having a design capacity less than 2.5 million megagrams or 2.5 million cubic meters were not included because the Raleigh County Sanitary Landfill exceeds these design limits.

- The facility is not currently required to have an active collection system and control device installed because of their NMOC emissions; however, the facility has opted to put in an active control system pre-emptively. They are currently Tier 2 with NMOC emissions of 24.39 Mg/yr. NMOC emissions must be reported annually, or a 5 year-projection must be provided in lieu of the annual report in accordance with condition 4.5.2.c.
 - The reports required under conditions 4.5.1 and 4.5.2 were submitted in 2019.
- Section 5.0
 - The requirements for the Active Gas Collection System were moved from Section 4.0 to Section 5.0.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

- | | |
|---|---|
| 40 C.F.R. Part 64 | The facility does not have any pollutant specific emissions units (PSEU) that satisfy all of the applicability criteria requirements of 40 CFR §64.2(a). [(1) have pre-control regulated pollutant potential emissions (PTE) equal to or greater than the “major” threshold limits to be classified as a major source; 2) are subject to an emission limitation or standard and; 3) have a control device to achieve compliance with such emission limitation or standard.] Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule. |
| 40 C.F.R. Part 63
Subpart AAAA | National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills. This facility is not subject to 40 C.F.R. Part 63 Subpart AAAA since the facility is not a major source of HAPs, nor is it collocated with a major source, nor is it an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m ³) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC. |
| 40 C.F.R. §61.154 | The facility does not receive asbestos-containing waste material from sources covered under 40 C.F.R. §61.149, §61.150, or §61.155. |
| 40 C.F.R. 60
Subpart Kb | The Leachate Tanks VOL vapor pressures are less than 3.5 kPa. |

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: October 19, 2023
Ending Date: November 20, 2023

Point of Contact

All written comments should be addressed to the following individual and office:

Nikki Moats
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 41282
Nikki.B.Moats@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.